QUINTANA A., P. and M. GONZALEZ ESPINOSA. 1993. Afinidad fitogeográfica y papel sucesional de la flora leñosa de los bosques de pino-encino de los altos de Chiapas, México. Acta Botánica Mexicana 21:43–57.

REICH, P., M. ABRAMS, D. ELLSWORTH, E. KRUGER, and T. TABONE. 1990. Fire affects ecophysiology and community dynamics of central Wisconsin oak forest regeneration. Ecology 71(6):2180–2190.

RHOADES, R. W. 1992. Compositional changes in an oak forest in southwestern Virginia after twenty years. Castanea 57(4):252–263.

RZEDOWSKI, J. 1978. Vegetación de México. Limusa, México. 432 p.

SOSA, V. and H. PUIG. 1987. Regeneración del estrato arbóreo en el bosque mesófilo de montaña. Pp. 113–131 *in* H. Puig y R. Bracho (eds.), El bosque mesófilo de montaña de Tamaulipas. Publ. Instituto de Ecología, México, D.F.

TILMAN, D. and S. PACALA. 1993. The maintenance of species richness in plant communities. Pp. 13–25 *in* R. E. Ricklefs and D. Schluter (eds.), Species diversity in ecological communities. The Univ. of Chicago Press. Chicago.

NOTEWORTHY COLLECTIONS

CALIFORNIA

RANUNCULUS HYDROCHAROIDES A. Gray (RANUNCULACEAE)—Inyo Co., Owens Valley, pasture irrigation ditches on Los Angeles Department of Water and Power land near Bishop, 1271 m, 27 Aug 1994, *D. W. Pritchett 144* verified by A. Whittemore (Missouri Botanical Garden); Mono Co., Sierra Nevada, Inyo National Forest, uncommon in streambed of Mill Creek, ca. 2.7 km downstream from Lundy Lake, 2268 m, 5 Jul 1993 *M. O. Bagley 4447*; same location, 23 Jun 1994, *M. O. Bagley 4531*; same location, 14 Jul 1994, *M. O. Bagley 4639*; these three collections verified by D. H. Wilken (Santa Barbara Botanic Garden).

Previous knowledge. This species was known from California only in the Owens Valley, Inyo Co. (Munz and Keck, A California Flora and Supplement, 1968, who noted that it had been collected by Kellogg in 1874). The populations nearest to the Owens Valley were reported to be in northern Baja California (>450 km distant) and in the San Francisco Peaks area of Arizona (>550 km distant); it was also reported in the mountains of northern and eastern Arizona, western New Mexico, and in Mexico from Baja California and Sonora south to Guatemala (L. Benson, The American Midland Naturalist 40(1):190, 1948).

Ranunculus hydrocharoides was collected in 1970 by Mary DeDecker (*DeDecker 2501*) along the south fork of Oak Creek at 1540 m, ca. 330 m above the Owens Valley floor. In 1979, it was reported, but not collected, at two locations in Inyo Co.: Oak Creek and Bishop (Tim Nosal, California Dept. of Fish and Game Natural Diversity Data Base (NDDB), personal communication).

Smith and Berg (California Native Plant Society (CNPS), Inventory of Rare and Endangered Vascular Plants of California, fourth ed., 1988) placed *R. hydrocharoides* on CNPS List 2, "rare, threatened or endangered in California, but more common elsewhere." They also stated that it occurred on the Kearsarge Peak, Bishop and Mt. Thompson 7.5 minute USGS topographic maps. D. H. Wilken (*Ranunculus* in J.

Hickman [ed.], The Jepson Manual: Higher Plants of California, University of California Press, 1993) noted, however, that while *R. hydrocharoides* was known from the Owens Valley, it had been "last seen in 1874." Skinner and Pavlik (eds., CNPS, Inventory of Rare and Endangered Vascular Plants of California, fifth ed., 1994) subsequently placed the species on CNPS list 1A, "extinct in California."

Significance. In August 1994, CNPS Assistant Botanist David Tibor alerted the lead author to the discrepancy between the 1993 Jepson Manual note and the 1979 NDDB information regarding *R. hydrocharoides.* We visited the previously noted Bishop location of this plant (Bishop USGS map) and found two small patches of it in two irrigation ditches.

Mary DeDecker visited the Oak Creek location (Kearsarge Peak USGS map) in September 1994 and reported that the site was dry due to drought; she was unable to find the previously reported patch of *R. hydrocharoides* from which she had made her collection.

It remains unclear where or if the plant has been seen in any location covered by the Mt. Thompson USGS map.

Mark Bagley had observed and collected an undetermined aquatic *Ranunculus* in Mono Co. in both 1993 and 1994, at a location 100 km north of and considerably higher in elevation than known Owens Valley *R. hydrocharoides* sites; his specimens have now been determined to be *R. hydrocharoides.*

Thus this plant is extant in California: It still exists in the Owens Valley, it extends north into Mono Co., and it may be more widespread than previously realized.

—Sara J. Manning, 401 E. Yaney St., Bishop CA 93514; Daniel W. Pritchett, P.O. Box 1411, Bishop CA 93515; and Mark O. Bagley, P.O. Box 1431, Bishop CA 93515.

Senecio mikanioides Walp. (Asteraceae)—Los Angeles Co., Angeles National Forest, San Gabriel Mts., T1N, R9W, S13, SE¼, 460 m elev., 11 Feb. 1995, *Scott D. White 2537* (UCR), verified by A.C. Sanders (UCR). San Dimas Canyon, slope just above wash above N end of San Dimas Reservoir, directly across road from US Forest Service San Dimas Station. Several well-established patches, ca. 10 m diameter, covering ground and climbing to ca. 4 m ht. in *Salix lasiolepis* and *Baccharis salicifolia.*

Previous knowledge. Senecio mikanioides (German ivy) is native to South Africa. It spreads aggressively in coastal California, especially in riparian vegetation, eventually covering virtually all available substrate. Known from North Coast, Central Coast, and San Francisco Bay regions <200 m elev. (T. M. Barkley 1993; p. 340 *in* J. C. Hickman, ed., *The Jepson Manual*) and scattered sites in the Santa Monica Mts. and San Diego Co. (Jake Sigg, personal communication).

Significance. First record from San Gabriel Mts., >60 km E from known locations in the Santa Monica Mts. Farthest inland (ca. 60 km from coast) record in California. This occurrence suggests that *Senecio mikanioides* can continue to expand its range inland from the maritime areas where it is a well known threat to native riparian vegetation.

—Scott D. White, Tierra Madre Consultants, Inc., 1159 Iowa Avenue, Suite E, Riverside, CA 92507.

Oregon

Berberis darwinii Hook. (Berberidaceae).—Coos Co., scattered vigorous flowering plants on the coastline northeast of Cape Arago and southwest of the town of Charleston, T26S R14W S17, elev. ca. 20 m, in undisturbed wind-pruned coastal

scrub composed of *Gaultheria shallon, Vaccinium ovatum, Lonicera involucrata, Picea sitchensis,* etc., 1 April 1995, *P. F. Zika 12296, B. Rittenhouse, B. Newhouse, et al.* (OSC).

Previous knowledge. Native to South America, from Chile to Patagonia, Darwin's barberry is occasionally cultivated as an ornamental along the coast and in the valleys west of the Cascades.

Significance. This is the first record for Oregon as a naturalized plant. It was surely bird-dispersed to the reported locality from gardens within a few kilometers. Some shrubs were 2 meters tall and sprawling over adjacent vegetation, suggesting it has the potential to become a pest species.

—Peter F. Zika. Herbarium, Department of Botany and Plant Pathology, Oregon State University, Corvallis, OR 97331.

Sonora, Mexico

The four new records reported here are from east-central Sonora in the vicinity of Mulatos and Matarichi, approximately 14 to 20 km west of the Chihuahua border. These specimens were collected in the Sierra Madre Occidental in a region that previously had not been botanically explored. This area is remarkable for its extensive areas of hydrothermally altered soils and complex topography that provide a unique range of habitats. Despite earlier and current extensive botanical exploration farther south in the state (e.g., Gentry, Rio Mayo Plants, 1942, and Jenkins, The Revision of Howard Scott Gentry's Rio Mayo Plants, At The Pass Conference, May 1993, Borderlands Studies, University of Texas, El Paso, in press), these species have not been found farther south in Sonora, nor are they reported for the flora of Nabogame in nearby Chihuahua (Laferrière, Phytologia 77:102-140, 1995).

Chaetium bromoides (Presl) Benth. ex Hemsl. (Poaceae).—Municipio de Sahuaripa, El Victor, on the Rio Mulatos, ca 3 km east of town of Mulatos, 28°39′40″N, 108°43′15″W, 920 m, east-facing hillside-riverbank just above the usual flood zone, tropical deciduous forest including *Acacia occidentalis, Lysiloma watsonii,* and *Montanoa leucantha,* 13 October 1994, *Felger 94-414 & Búrquez* (ARIZ, MEXU, UC).

Previous knowledge. Central America to Chihuahua (McVaugh, Flora Novo-Galiciana 14, 1983.).

Significance. New for Sonora, representing the northernmost record for this tropical genus.

Digitaria ternata (A. Rich.) Stapf (Poaceae).—Municipio de Sahuaripa, 1.4 mi NW of Matarachi, 28°42′05.1″N, 108°50′13.0″W, 1620 m, low hills at the northwest side of the Matarachi valley, pine-oak forest including *Quercus chihuahuensis, Pinus leiophylla* var. *chihuahuana, Juniperus deppeana, Ceanothus* sp., and *Agave wocomahi,* 12 October 1994, *Felger 94-387B & Búrquez* (ARIZ).

Previous knowledge. Durango (González et al., Listados Floristicos de México, IX. Flora de Durango, Instituto de Biología, UNAM, 1991.), Jalisco and elsewhere in the Central Plateau of Mexico. This Old World annual was apparently first collected in Mexico in 1952-1953 (McVaugh 1983).

Significance. New for Sonora. It seems unusual to find this usually weedy species in a largely undisturbed habitat in a sparsely inhabited region of the Sierra Madre Occidental far from areas of mechanized agriculture.

Pouzolzia palmeri S. Watson (Urticaceae).—Municipio de Sahuaripa, 1.6 km S of Mulatos, east-west canyon draining eastward, ca. 0.5 km upstream from Proyecto

Mulatos, 28°38′30″N, 108°45′42″W, 1240 m, riparian oak woodland with some tropical deciduous forest species, e.g., *Lysiloma microphyllum, L. watsonii, Quercus chihuahuensis, Q. tuberculata, Buddleja parvifolia, Montanoa leucantha*; open, sparsely-branched shrubs 1.8–2.5 m tall on north-facing slope near canyon bottom, beneath *Lysiloma watsonii,* 15 October 1994, *Felger 94-756 & Búrquez* (ARIZ, CAS, MEXU, TEX).

Previous knowledge. Known from Sinaloa and Jalisco to Morelos (Standley, 1922, Contributions from the United States National Herbarium 23:220).

Significance. First report of the genus from Sonora. The specimen was collected from a locally extensive population, but we did not find it elsewhere in the region.

Buddleja marrubiifolia Bentham subsp. *occidentalis* Norman (Buddlejaceae).—Municipio de Sahuaripa, El Victor, on the Río Mulatos, ca 3 km east of town of Mulatos, 28°39′40″N, 108°43′15″W, 920 m, east-facing hillside-riverbank, just above the usual flood zone, with tropical deciduous forest species including *Acacia occidentalis, Lysiloma watsonii, Montanoa leucantha*; dwarf shrub, ca 40 cm tall, in crevice of rock face by river, 13 October 1994, *Felger 94-428 & Búrquez* (ARIZ, MEXU, UC).

Previous knowledge. This species is common in the Chihuahuan Desert, and this subspecies occurs in southwestern Chihuahua (Norman, Gentes Herbarum 10:47–114, 1967; Journal Arizona Academy Sciences 26:5–6, 1992.).

Significance. First report of this species in Sonora.

—Richard S. Felger, Herbarium, University of Arizona, Tucson, AZ 85721 and Alberto Búrquez Montijo, Universidad Nacional Autonoma de México, Centro de Ecología, A.P. 1354, Hermosillo, Sonora 83000, México.

Washington

Saxifragopsis fragarioides (Green) Small (Saxifragaceae).—Chelan Co., Wenatchee National Forest, ca. 8 miles northwest of Leavenworth in the Alpine Lakes Wilderness, T25N, R16E, S03, elevation ca. 4300 feet, northwesterly aspect (240 degrees). Growing in Kcb garnet-biotite-quartz schist rock cliff crevices at the mouth of the Painter Creek Drainage. Numerous plants scattered over an area of ca. 500 m by 500 m, associated with *Carex rossii, Cheilanthes gracillima, Heuchera cylindrica, Lomatium brandegei, Penstemon davidsonii, Phlox hoodii* and others. 15 June 1994, *Harrod 391* (WTU).

Previous knowledge. Native to northern California and southwestern Oregon. First known in Washington from a popular climbing area (*Burnett and Arnot 346a, 346b,* WTU), and thought a possible human introduction (Gage, Madroño 39(4): 310, 1992).

Significance. Second record for Washington. The Painter Creek population is in a remote and untrafficked area, which significantly increases the likelihood that the Washington populations are naturally occurring, ca. 400 miles disjunct from the next nearest populations in southwestern Oregon.

—Sarah Gage, Herbarium, Department of Botany, University of Washington, Box 355325, Seattle, WA 98195-5325.

Collomia macrocalyx Leiberg ex Brand (Polemoniaceae).—Yakima Co. Umtanum Ridge west of Priest Rapids Dam along the Columbia River, T13N R23E S04. Two patches of plants, each consisting of approximately 50 plants, past anthesis. Located on the side of a narrow, steep canyon on substrate composed of small rocks and sand derived from basalt. Basalt outcrops and talus are interfingered throughout

the area. In addition, a few plants were scattered in alluvium in the creekbed at the base of the canyon 370 m elevation. Sparse vegetation, with *Epilobium minutum, Eriophyllum lanatum, Cirsium* sp., *Bromus tectorum* and *Eriogonum niveum* present at the site. 8 July, 1994, *D. Salstrom* 9468 (WTU).

Previous knowledge. Previously thought to be endemic to Oregon, primarily in the north-central portion of the state (Joyal, Unpublished M.S. thesis, Oregon State University, 1983).

Significance. First record for Washington.

Camissonia scapoidea (Torr. & Gray) Raven (Onagraceae).—Kittitas Co. T16N R23E S19, 20, in large gravel deposit within 0.5 miles of the Columbia River. Sparse vegetation, with *Mentzelia laevicaulis, M. albicaulis, Eriastrum sparsiflorum* var. wilcoxii, *Silene cserei, Bromus tectorum* and *Eriogonum niveum* present in the area. Elevation 280 m. Probably ssp. *brachycarpa* (Raven) Raven, but additional specimens are required to confirm subspecies identification. 8 June, 1994. *D. Salstrom* 9469 (WTU).

Previous knowledge. C. scapoidea Subsp. *scapoidea:* southeastern Oregon, and central idaho, and western and central Wyoming, western Colorado, northeastern Arizona, and adjacent New Mexico, throughout Utah, and in northeastern Nevada. Ssp. *brachycarpa:* southeastern Oregon, southwestern Idaho, northwestern Utah, and northeastern Nevada. From 850–2000 m elevation. [Raven. A revision of the genus *Camissonia* (Onagraceae). Contributions from the U.S. National Herbarium 37(5): 226, 1969].

Significance. First record for Washington.

Lathyrus torreyi Gray (Fagaceae).—Pierce Co., T19N R02E S14, Porter Hills. Four small patches located in openings within a coniferous forest. Along infrequently used wildlife paths, with one patch along a maintained recreational trail. 110 m elevation. Glacial till substrate within a series of low drumlins. 21 July, 1994. *D. Salstrom, J. Gamon* 94721 (WTU).

Previous knowledge. In Washington, the taxon was known only from a few historic collections (four in Pierce County and two in Clark County) and had not been observed in the state since 1946.

Significance. The taxon was thought to have been potentially extirpated from the state [Washington Natural Heritage Program. Endangered, threatened and sensitive vascular plants of Washington. Department of Natural Resources, Olympia. 1994].

—Debra Salstrom, Washington Natural Heritage Program, Box 47016, Olympia, WA 98504-7016.